



Department of Energy

ROCKY FLATS FIELD OFFICE
10808 HIGHWAY 93, UNIT A
GOLDEN, COLORADO 80403-8200

02-DOE-00108

JAN 30 2002

Mr. Steven H. Gunderson
RFCA Project Coordinator
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, CO 80222-1530

Dear Mr. Gunderson:

In accordance with the Rocky Flats Cleanup Agreement Standard Operating Protocol (RSOP) for Component Removal, Size Reduction and Decontamination Activities, this letter and its enclosures is notification for RSOP implementation. This letter notifies Colorado Department of Public Health and Environment (CDPHE) of the removal of contaminated portions of the Building 886 slab before the demolition of the facility. Due to the operations and spills within Building 886, there are portions of the slab that will be removed and dispositioned as waste before the actual demolition. The removal of the contaminated portions of the slab will be conducted in accordance with the RSOP for Component Removal, Size Reduction and Decontamination Activities, particularly Sections 3.3 and 3.4.

An Interim Measures/Interim Remedial Action was completed and approved for the decommissioning of Building 886 with the exception of the slab. The slab will be decommissioned in accordance with the RSOPs. Once the pre-demolition survey is complete and the remaining slab meets the unrestricted release criteria, an additional notification letter will be prepared to implement the RSOP for Facility Disposition.

Kaiser-Hill Company, L.L.C. (K-H) construction will conduct this work. If K-H construction proposes to use alternate methods, an additional notification will be made, and in consultation with Department of Energy, the RFCA process for decision document modification will be used.

The appropriate checklists and information required by the RSOP are enclosed in this letter and should provide the necessary information. This work will be conducted in accordance with the work control documentation prepared by K-H construction. The exact methods and process selected by the subcontractor and progress of the activities will be communicated to DOE through the consultative process, particularly the weekly Building 886 status meeting.

DOCUMENT CLASSIFICATION
REVIEW WAIVER PER
CLASSIFICATION OFFICE

ADMIN RECORD

bcc: Deputy Manager's Read File.

B886-A-000043

CEX-072-99

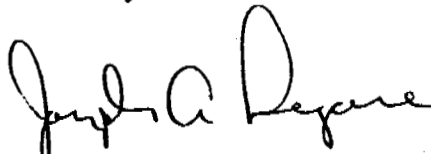
Mr. Steven H. Gunderson
02-DOE-00108

2

JAN 30 2002

The building shell will be breached during component removal activities, hence the six-part analysis required under Section 3.8 of the RSOP is included in the enclosure. Questions can be directed to Steve Tower, Acting Manager of Projects, Rocky Flats Field Office at (303) 966-2133.

Sincerely,



Joseph A. Legare
Assistant Manager
for Environment and Stewardship

Enclosure

cc w/o Encl:
S. Tower, AMP, RFFO
F. Gibbs, K-H
B. Steward, K-H
D. Foss, K-H
T. Rehder, EPA

cc w/Encl:
Building 850 Administrative Record



2

RSOP for Component Removal, Size Reduction, and Decontamination Activities Checklist

Project scope: Building 886 contaminated slab removal				
Facility description: Building 886, Nuclear Safety Criticality Lab				
Description of planned activity(ies): Due to operations and spills in some of the rooms of Building 886, portions of the slab cannot be decontaminated to meet the unrestricted release criteria and will be removed and dispositioned as waste. This activity will take place before initiating the pre-demolition survey; therefore, the outside structure will still be intact. This activity will be coordinated with Environmental Restoration to ensure that the areas exposed by the slab removal are evaluated and either remediated or contained before continuing demolition activities.				
Facility/rooms/sets/areas involved: Building 886, slab removal, Room 101 around the tank pit area and Room 103 where the criticality experiments and tanks were located				
Is RCRA unit closure(s) part of the planned activity? <i>If RCRA units are included, attach unit specific information sheets and drawings</i>			<input type="checkbox"/>	Yes
			<input checked="" type="checkbox"/>	No
Attach checklists from Appendix A of the RSOP. <i>Complete checklists by room/set/area/facility, as appropriate</i>		<input checked="" type="checkbox"/>	Component Removal/Size Reduction	
		<input checked="" type="checkbox"/>	Decontamination	
RLCR Status	<input checked="" type="checkbox"/>	RLCR complete and concurrence received: November 1997		
	<input type="checkbox"/>	RLCR initiated but incomplete; concurrence anticipated:		
	<input type="checkbox"/>	RLC has not been initiated¹ and is scheduled for initiation on:		
If RLCR is not complete or initiated, what data will be used to plan the work activities?				
Activity requires modification to the ARARs listed in the RSOP.			<input type="checkbox"/>	Yes, attach to letter
			<input checked="" type="checkbox"/>	No
Attach Administrative Record file requirements for the activity.				
Point of contact for each facility/activity: Bill Steward, 303-966-3543				
Duration of work activities: ~1 month		Anticipated work start: contract award 1/02 work start 4/02		
Attach schedule for each facility or activity for information purposes.				
Does the activity involve removing contaminated portions of the building shell? Include a description of the activity, contamination levels and controls Six-point analysis is attached			<input checked="" type="checkbox"/>	Yes, LRA consultation and concurrence required
			<input type="checkbox"/>	No

¹ Evaluate using DPP, Sections 1.1.4 and 1.1.5 and the consultative process to implement activities

RSOP for Component Removal, Size Reduction, and Decontamination Activities Checklist

Are there deviations/exceptions to the RSOP for the proposed activity(ies)?										<input type="checkbox"/>	Yes
										<input checked="" type="checkbox"/>	No
Provide an explanation of deviation/exception to the RSOP: Not applicable											
Check the appropriate resulting action box below											
Additional RFCA decision document required (PAM – IM/IRA)											
Major modification to RSOP						Field change to RSOP					
Minor modification to RSOP						LRA consultation					
Activity(ies) will result in the following waste types										<input type="checkbox"/>	Process waste
										<input checked="" type="checkbox"/>	Remediation waste
<input type="checkbox"/>	TRU	<input checked="" type="checkbox"/>	LLW	<input type="checkbox"/>	LLMW	<input type="checkbox"/>	Haz.	<input type="checkbox"/>	Sanitary	<input type="checkbox"/>	Other:
LRA Notification Review Time					<input checked="" type="checkbox"/>	14 days, no RCRA unit closure involved					
					<input type="checkbox"/>	30 days, RCRA unit closure involved					

**FACILITY COMPONENT REMOVAL, SIZE REDUCTION, AND DECONTAMINATION
ACTIVITY CHECKLIST**

Building: 886

Closure Project Manager: Bill Steward

COMPONENT REMOVAL/SIZE REDUCTION

Gloveboxes	
Tanks and ancillary equipment (located both inside and outside the facility)	
Fume hoods	
Ventilation/filtration systems (both inside and outside the facility)	
Utilities and other equipment (both inside and outside the facility; including electrical, steam, and fire suppression systems)	
Walls	
Floors	✓
Ceilings	
Roofs	
Other structural members	
Other*	

Small tools	✓
Paving breaker, jackhammer and/or similar tools used to break up concrete	✓
Excavators, such as backhoes, to excavate underground components, such as tanks and ancillary equipment	
Hoists and cranes	
Plasma arc cutter	
Diamond wire saw	
Wachs cutter	
Laser cutter	
Oxy-torch cutter	✓
Hydraulic shears	
Shear baler	
Water cutter using abrasives	
Arc air slice	
Arbor press	
Non-explosive cracking agent	
Other *	

* Describe "Other" Component Type(s) and/or Removal/Size Reduction Technique(s):

5

FACILITY COMPONENT REMOVAL, SIZE REDUCTION, AND DECONTAMINATION ACTIVITY CHECKLIST

DECONTAMINATION

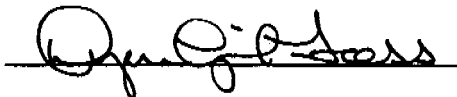
Gloveboxes	
Tanks and ancillary equipment (located both inside and outside the facility)	
Fume hoods	
Ventilation/filtration systems (both inside and outside the facility)	
Utilities and other equipment (both inside and outside the facility; including electrical, steam, and fire suppression systems)	
Walls	
Floors	✓
Ceilings	
Roofs	
Other structural members	
Other*	

Wiping/scrubbing/washing with water or detergents	✓
Vacuuming	
Strippable Coating	
Grinding	
Scarifying	✓
Scabbling	✓
Paving breaker/chipping hammer	
Spalling	
Abrasive/grit blasting	
CO ₂ blasting	
Hydrolasing	
Strong mineral acids	
Organic or weak acids	
Additional oxidants, such as cerium and other similar metals	
Other *	

* Describe "Other" Component(s) and/or Decontamination Technique(s):

Note: In the event a planned activity falls outside the scope of this RSOP, the closure project manager will consult with DOE and the LRA to determine whether this RSOP should be modified to include the activity, or whether a separate decision document should be written.

Prepared by:



Date:

1/7/02

6

Administrative Record Requirements for this Activity

- Final Rocky Flats Cleanup Agreement (RFCA)
- RFETS Decommissioning Program Plan (DPP)
- RFCA Standard Operating Protocol for Component Removal, Size Reduction, and Decontamination Activities
- Notification Letter and subsequent CDPHE correspondence, if appropriate

In accordance with Section 3.8.1 of the RSOP for Component Removal, Size Reduction, and Decontamination Activities, a six point analysis must be conducted in preparation for removing contaminated portions of the building shell. Prior to the demolition of Building 886, contaminated portions of the slab in rooms 101 and 103 will be removed and packaged/dispositioned as waste. The slab will be removed with a commercially available pavement breaker. Minimal water will be used in order to reduce the possibility of contaminating the soil beneath the slab; instead, HEPA filter fan units will be set-up in the area of pavement breaking and an eight inch hose will draw air from the area, reducing the dust. The following addresses the RSOP analysis requirements for this activity.

Relative Cost. In accordance with the RSOP, this analysis is not required if it is not feasible to decontaminate the component. Due the operational activities conducted in Building 886, portions of the slab are volumetrically contaminated and cannot be decontaminated.

Structural Evaluation. Building 886 has a floating slab that is not tied into the walls of the facility. Engineering control will not be required during slab removal. See attached letter from Dennis Weingardt.

Air Emissions. Since the walls and roof of Building 886 will be intact during the slab removal, there will be minimal potential for emissions to the environment. An environmental checklist will be prepared for this activity since it was not assessed as part of the IM/IRA, and any controls specified by the checklists with respect to emissions will be implemented.

Dust Generation. The dust will be controlled with HEPA filtered fans and kept to a minimum. Industrial hygiene requirements for worker health and safety will be specified in the project-specific Health and Safety Plan. Since the walls and roof of Building 886 will be intact during the slab removal, there will be minimal potential for emissions to the environment. An environmental checklist will be prepared for this activity since it was not assessed as part of the IM/IRA, and any controls specified by the checklists with respect to emissions will be implemented.

Impacts to Surface Water. Since the walls and roof of Building 886 will be intact during the slab removal and water will not be the primary dust control measure, there will be negligible potential to impact surface water. An environmental checklist will be prepared for this activity since it was not assessed as part of the IM/IRA, and any controls specified by the checklists with respect to surface water will be implemented.

Impacts to Migratory Birds. Since the walls and roof of Building 886 will be intact during the slab removal, there will no impact migratory birds. An environmental checklist will be prepared for this activity since it was not assessed as part of the IM/IRA, and any controls specified by the checklists with respect to migratory birds will be implemented.

December 26, 2001

Structural Evaluation for Building 886

Introduction

In accordance with the *Rocky Flats Cleanup Agreement Standard Operating Protocol for Component Removal, Size Reduction and Decontamination Activities*, a structural evaluation was performed to identify the engineering controls required to allow for the safe removal of the slab in room 101 and the pit in 103 in Building 886 prior to the demolition of the structure. A Colorado registered professional structural engineer performed this engineering evaluation.

Assumptions

It was assumed that the exterior walls, roof, and interior cast-in-place concrete walls would remain in place during the slab and pit removal. In addition, it was assumed that only the pit would be removed in room 103.

It was assumed that the structure is classified as a PC-1 hazard.

It is a requirement that no excavation occur below the bottoms of foundations. It is also a requirement that the slab between the pit and wall (approximately 7 feet wide) be maintained.

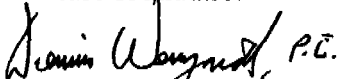
Summary

Room 101 is constructed of thick concrete walls and roof. The dead weight from these walls and roof provide more than sufficient sliding and uplift resistance to the room structure caused by a PC-1 wind.

Room 103 is not constructed of heavy components. However, the pit that will be excavated is near an interior row of columns at one end and approximately 7 feet away from the row of exterior columns in room 103. The interior row of columns has no earth support at the pit and therefore cannot resist lateral loads from wind. However, no lateral load would occur at the interior columns from wind, and therefore, the pit excavation (assuming the excavation does not undermine the foundation) has no effect on the interior column foundation. The exterior row of columns does require strength against lateral wind force, but the exterior row of columns is located approximately 7 feet away from the pit. This 7 feet of earth is available as resistance against lateral wind loads.

Conclusions

Based on an evaluation, assuming PC-1 wind loading and no seismic load, no engineering controls are required during the slab or pit removal as long as excavation does not extend below the structure foundations.

 P.E.

Dennis Weingardt, P.E.
PMTEC



Colorado Department of Regulatory Agencies (DORA)

Division of Registrations

Individual Search - Results List


Engineers And Land Surveyors


Click on a name for more information, including disciplinary information:

Name	License Number	License Status	License Type	City
WEINGARDT , DENNIS	18806	Active	Professional Engineer	Wheatridge, CO

Query returned 1 Individual License Records based on the following search criteria:

- Licensing Board : Engineers And Land Surveyors
- License Number :
- Last Name : weingardt
- First Name : dennis
- City :
- License Type :

 [Return to Colorado Division of Registrations - Main Search Page](#)

 [Search for Individuals - Engineers And Land Surveyors](#)

 [View Registrations Online Disciplinary Documents](#)

[Colorado Home Page](#)[DORA Home Page](#)[Registrations Home Page](#)[Web Usage Statistics](#)

For comments or questions, send email to: Webmaster@dora.state.co.us

Database Last Updated: 12/27/2001 03:02 am

Page Generated: 12/28/2001 07:54 a.m.

10



Colorado Department of Regulatory Agencies (DORA)

Division of Registrations

Individual Information

Engineers And Land Surveyors




WEINGARDT , DENNIS

Address Wheatridge, CO 80034-1742
Phone Number

License Number 18806
License Type Professional Engineer
License Status Active

License First Issued October 21, 1981
Last Renewal Date November 1, 2001
License Expiration Date October 31, 2003

Disciplinary Information No Disciplinary Information on file.

-  [Return to Colorado Division of Registrations - Main Search Page](#)
-  [Search for Individuals - Engineers And Land Surveyors](#)
-  [View Registrations Online Disciplinary Documents](#)



Colorado
HomePage



DORA
HomePage



Registrations
HomePage



Web Usage
Statistics

For comments or questions, send email to: Webmaster@dora.state.co.us

Database Last Updated: 12/27/2001 03:02 am

Page Generated: 12/28/2001 07:55 a.m.

11 / 11